

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/574,787
Source: IFWP
Date Processed by STIC: 5/5/06

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/574,787

CRF Edit Date: 5/5/06
Edited by: AR

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

___ Deleted: invalid beginning/end-of-file text ; page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

___ Other:



IFWP

RAW SEQUENCE LISTING

DATE: 05/05/2006

PATENT APPLICATION: US/10/574,787

TIME: 16:43:47

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05052006\J574787.raw

3 <110> APPLICANT: Bayer HealthCare AG

5 <120> TITLE OF INVENTION: Diagnostics and Therapeutics for Diseases Associated with N-Acetylated

6 Alpha-Linked Acidic Dipeptidase-Like 1 (NAALADASE-likel)

8 <130> FILE REFERENCE: BHC 03 01 003

C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/574,787

C--> 10 <141> CURRENT FILING DATE: 2006-04-06

10 <160> NUMBER OF SEQ ID NOS: 5

12 <170> SOFTWARE: PatentIn version 3.1

14 <210> SEQ ID NO: 1

15 <211> LENGTH: 2320

16 <212> TYPE: DNA

17 <213> ORGANISM: Homo sapiens

19 <220> FEATURE:

20 <221> NAME/KEY: misc_feature

21 <222> LOCATION: (315)..(315)

22 <223> OTHER INFORMATION: n=a,c,g,t

24 <400> SEQUENCE: 1

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26 cctcttgggg ctggggatca tcctcggcca ctttgccatc cccaaaaaag ccaactcact    120
27 ggccccccag gacctggacc tggagatcct ggagaccgtc atggggcagc tggatgccca    180
28 caggatccgg gagaacctca gagaactctc cagggagcca cacctggcct ccagccctcg    240
29 ggatgaggac ctggtgcagc tgctgctgca gcgctggaag gaccagagt caggcctgga    300
W--> 30 ctcgggccgag gcctncacgt acgaagtgt gctgtccttc cctagccagg agcagcccaa    360
31 cgtcgtggac atcgtgggcc ccactggggg catcatccac tcctgccacc ggactgagga    420
32 gaacgtgacc ggggagcaag gggggccaga tgtggtacaa ccctatgctg cctatgctcc    480
33 ttctggaacc ccacagggcc tcctcgtcta tgccaaccgg ggcgcggaag aagactttaa    540
34 ggagctacag actcagggca tcaaacttga aggcaccatt gccctgactc gatatggggg    600
35 tgtagggcgt ggggccaaag ctgtgaacgc tgccaagcac ggggtagctg ggggtgctgg    660
36 gtacacagac cctgccgaca tcaacgatgg gctgagctca cccgacgaaa cctttcccaa    720
37 ctcttggtac ctgccccctc caggagtgga gcgaggctcc tactacgagt attttgggga    780
38 ccctctgact ccctaccttc cagccgtccc ctcttccttc cgcgtggacc ttgccaatgt    840
39 ctccggattt cccccaattc ctacacagcc cattggcttc caggatgcaa gagacctgct    900
40 ctgtaacctc aacggaactt tggccccagc cacctggcag ggagcactgg gctgccacta    960
41 cagggtgggt cccggcttcc ggctgacgg agacttccca gcagacagcc aggtgaatgt   1020
42 gagcgtctac aaccgcctgg agctgaggaa ctcttccaac gtccctgggca tcatccgtgg   1080
43 ggctgtggag cctgatcgct acgtgctgta tgggaaccac cgagacagct ggggtgcacgg   1140
44 ggctgtggac cccagcagtg gcaccgccgt cctcctggag ctctcccgtg tcctggggac   1200
45 cctgctgaag aagggcacct ggctcctcg cagatcaatc gtgtttgcga gctggggggc   1260
46 tgaggagtth gggctcattg gctccacgga attcacagaa gaggttcttc acaagctgca   1320
47 ggagcgcacg gtggcctaca tcaacgtgga catctcggtg ttgccaacg ctacccttag   1380
48 ggtgcagggg acgccccctg tccagagcgt cgtcttctct gcaaccaaag agatccgctc   1440
49 accaggccct ggcgacctga gcatctacga caactggatc cggtaacttc accgcagcag   1500
50 cccggtgtac ggctgggtcc ccagcttggg ttctctgggt gctggcagcg actatgcacc   1560

```

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DATE: 05/05/2006

PATENT APPLICATION: US/10/574,787

TIME: 16:43:47

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05052006\J574787.raw

```

51 cttegttcac ttcctgggca tctcctccat ggacattgcc tatacctatg accggagcaa 1620
52 gacttcagcc aggatctacc ccacctacca cacagccttt gacacctttg actatgtgga 1680
53 caagtttttg gacccgggct tcagcagcca tcaggctgtg gcccggacag cggggagtgt 1740
54 gattctccgg ctcaagtaca gcttcttctt gcccctcaaa gtcagtgact acagtgagac 1800
55 actccgcagc ttcctgcagg cagcccagca agatcttggg gccctgctgg agcagcacag 1860
56 catcagcctg gggcctctgg tgactgcagt ggagaagttt gaggcagaag ctgcagcctt 1920
57 gggccaacgc atatcaacac tgcagaaggg cagccctgac cccctgcagg tccggatgct 1980
58 caatgaccag ttgatgctct tggaacggac ctttctgaac cctagagcct tcccagagga 2040
59 acgctactac agccatgtgc tctgggcacc ttcgcacggg ctccgtagtc acattccggg 2100
60 gctatccaat gcctgctcca gggccaggga cacagcttct ggatctgaag cttgggctga 2160
61 ggtccagaga cagctcagca ttgtggtgac agccctggag ggtgcggcag ccaccctgag 2220
62 gcctgtggct gacctctgac cccagccctc tttcttcagc cctcccttta ctccggtgct 2280
63 ttatatattac aaagtgtctt gtgtttttta aaagtctttt 2320

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65 <210> SEQ ID NO: 2

66 <211> LENGTH: 740

67 <212> TYPE: PRT

68 <213> ORGANISM: Homo sapiens

70 <220> FEATURE:

71 <221> NAME/KEY: MISC_FEATURE

72 <222> LOCATION: (100)..(100)

73 <223> OTHER INFORMATION: X=any

75 <400> SEQUENCE: 2

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77 1 5 10 15
78 Leu Gly Leu Gly Ile Ile Leu Gly His Phe Ala Ile Pro Lys Lys Ala
79 20 25 30
80 Asn Ser Leu Ala Pro Gln Asp Leu Asp Leu Glu Ile Leu Glu Thr Val
81 35 40 45
82 Met Gly Gln Leu Asp Ala His Arg Ile Arg Glu Asn Leu Arg Glu Leu
83 50 55 60
84 Ser Arg Glu Pro His Leu Ala Ser Ser Pro Arg Asp Glu Asp Leu Val
85 65 70 75 80
86 Gln Leu Leu Leu Gln Arg Trp Lys Asp Pro Glu Ser Gly Leu Asp Ser
87 85 90 95
W--> 88 Ala Glu Ala Xaa Thr Tyr Glu Val Leu Leu Ser Phe Pro Ser Gln Glu
89 100 105 110
90 Gln Pro Asn Val Val Asp Ile Val Gly Pro Thr Gly Gly Ile Ile His
91 115 120 125
92 Ser Cys His Arg Thr Glu Glu Asn Val Thr Gly Glu Gln Gly Gly Pro
93 130 135 140
94 Asp Val Val Gln Pro Tyr Ala Ala Tyr Ala Pro Ser Gly Thr Pro Gln
95 145 150 155 160
96 Gly Leu Leu Val Tyr Ala Asn Arg Gly Ala Glu Glu Asp Phe Lys Glu
97 165 170 175
98 Leu Gln Thr Gln Gly Ile Lys Leu Glu Gly Thr Ile Ala Leu Thr Arg
99 180 185 190
100 Tyr Gly Gly Val Gly Arg Gly Ala Lys Ala Val Asn Ala Ala Lys His
101 195 200 205
102 Gly Val Ala Gly Val Leu Val Tyr Thr Asp Pro Ala Asp Ile Asn Asp

```

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DATE: 05/05/2006

PATENT APPLICATION: US/10/574,787

TIME: 16:43:47

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05052006\J574787.raw

103	210					215					220					
104	Gly	Leu	Ser	Ser	Pro	Asp	Glu	Thr	Phe	Pro	Asn	Ser	Trp	Tyr	Leu	Pro
105	225					230					235					240
106	Pro	Ser	Gly	Val	Glu	Arg	Gly	Ser	Tyr	Tyr	Glu	Tyr	Phe	Gly	Asp	Pro
107					245					250					255	
108	Leu	Thr	Pro	Tyr	Leu	Pro	Ala	Val	Pro	Ser	Ser	Phe	Arg	Val	Asp	Leu
109				260					265					270		
110	Ala	Asn	Val	Ser	Gly	Phe	Pro	Pro	Ile	Pro	Thr	Gln	Pro	Ile	Gly	Phe
111			275					280				285				
112	Gln	Asp	Ala	Arg	Asp	Leu	Leu	Cys	Asn	Leu	Asn	Gly	Thr	Leu	Ala	Pro
113		290				295					300					
114	Ala	Thr	Trp	Gln	Gly	Ala	Leu	Gly	Cys	His	Tyr	Arg	Leu	Gly	Pro	Gly
115	305				310						315					320
116	Phe	Arg	Pro	Asp	Gly	Asp	Phe	Pro	Ala	Asp	Ser	Gln	Val	Asn	Val	Ser
117				325					330					335		
118	Val	Tyr	Asn	Arg	Leu	Glu	Leu	Arg	Asn	Ser	Ser	Asn	Val	Leu	Gly	Ile
119				340				345					350			
120	Ile	Arg	Gly	Ala	Val	Glu	Pro	Asp	Arg	Tyr	Val	Leu	Tyr	Gly	Asn	His
121			355				360					365				
122	Arg	Asp	Ser	Trp	Val	His	Gly	Ala	Val	Asp	Pro	Ser	Ser	Gly	Thr	Ala
123		370				375					380					
124	Val	Leu	Leu	Glu	Leu	Ser	Arg	Val	Leu	Gly	Thr	Leu	Leu	Lys	Lys	Gly
125	385				390					395						400
126	Thr	Trp	Arg	Pro	Arg	Arg	Ser	Ile	Val	Phe	Ala	Ser	Trp	Gly	Ala	Glu
127				405					410					415		
128	Glu	Phe	Gly	Leu	Ile	Gly	Ser	Thr	Glu	Phe	Thr	Glu	Glu	Phe	Phe	Asn
129			420					425					430			
130	Lys	Leu	Gln	Glu	Arg	Thr	Val	Ala	Tyr	Ile	Asn	Val	Asp	Ile	Ser	Val
131		435					440					445				
132	Phe	Ala	Asn	Ala	Thr	Leu	Arg	Val	Gln	Gly	Thr	Pro	Pro	Val	Gln	Ser
133		450				455					460					
134	Val	Val	Phe	Ser	Ala	Thr	Lys	Glu	Ile	Arg	Ser	Pro	Gly	Pro	Gly	Asp
135	465				470				475							480
136	Leu	Ser	Ile	Tyr	Asp	Asn	Trp	Ile	Arg	Tyr	Phe	Asn	Arg	Ser	Ser	Pro
137				485				490						495		
138	Val	Tyr	Gly	Leu	Val	Pro	Ser	Leu	Gly	Ser	Leu	Gly	Ala	Gly	Ser	Asp
139			500					505					510			
140	Tyr	Ala	Pro	Phe	Val	His	Phe	Leu	Gly	Ile	Ser	Ser	Met	Asp	Ile	Ala
141		515					520					525				
142	Tyr	Thr	Tyr	Asp	Arg	Ser	Lys	Thr	Ser	Ala	Arg	Ile	Tyr	Pro	Thr	Tyr
143		530				535					540					
144	His	Thr	Ala	Phe	Asp	Thr	Phe	Asp	Tyr	Val	Asp	Lys	Phe	Leu	Asp	Pro
145	545				550					555						560
146	Gly	Phe	Ser	Ser	His	Gln	Ala	Val	Ala	Arg	Thr	Ala	Gly	Ser	Val	Ile
147				565				570						575		
148	Leu	Arg	Leu	Ser	Asp	Ser	Phe	Phe	Leu	Pro	Leu	Lys	Val	Ser	Asp	Tyr
149			580					585					590			
150	Ser	Glu	Thr	Leu	Arg	Ser	Phe	Leu	Gln	Ala	Ala	Gln	Gln	Asp	Leu	Gly
151			595				600						605			

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DATE: 05/05/2006

PATENT APPLICATION: US/10/574,787

TIME: 16:43:47

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05052006\J574787.raw

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152 Ala Leu Leu Glu Gln His Ser Ile Ser Leu Gly Pro Leu Val Thr Ala
153      610      615      620
154 Val Glu Lys Phe Glu Ala Glu Ala Ala Leu Gly Gln Arg Ile Ser
155 625      630      635      640
156 Thr Leu Gln Lys Gly Ser Pro Asp Pro Leu Gln Val Arg Met Leu Asn
157      645      650      655
158 Asp Gln Leu Met Leu Leu Glu Arg Thr Phe Leu Asn Pro Arg Ala Phe
159      660      665      670
160 Pro Glu Glu Arg Tyr Tyr Ser His Val Leu Trp Ala Pro Ser His Gly
161      675      680      685
162 Leu Arg Ser His Ile Pro Gly Leu Ser Asn Ala Cys Ser Arg Ala Arg
163      690      695      700
164 Asp Thr Ala Ser Gly Ser Glu Ala Trp Ala Glu Val Gln Arg Gln Leu
165 705      710      715      720
166 Ser Ile Val Val Thr Ala Leu Glu Gly Ala Ala Ala Thr Leu Arg Pro
167      725      730      735
168 Val Ala Asp Leu
169      740

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171 <210> SEQ ID NO: 3

172 <211> LENGTH: 20

173 <212> TYPE: DNA

174 <213> ORGANISM: artificial sequence

176 <220> FEATURE:

177 <223> OTHER INFORMATION: forward primer

179 <400> SEQUENCE: 3

180 ctggaaggac ccagagtcag

20

182 <210> SEQ ID NO: 4

183 <211> LENGTH: 20

184 <212> TYPE: DNA

185 <213> ORGANISM: artificial sequence

187 <220> FEATURE:

188 <223> OTHER INFORMATION: reverse primer

190 <400> SEQUENCE: 4

191 tagggaagga cagcagcact

20

193 <210> SEQ ID NO: 5

194 <211> LENGTH: 19

195 <212> TYPE: DNA

196 <213> ORGANISM: artificial sequence

198 <220> FEATURE:

199 <223> OTHER INFORMATION: probe

201 <400> SEQUENCE: 5

202 ctggactcgg ccgaggcct

19

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/574,787

DATE: 05/05/2006
TIME: 16:43:48

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\05052006\J574787.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 315
Seq#:2; Xaa Pos. 100

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/574,787

DATE: 05/05/2006

TIME: 16:43:48

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05052006\J574787.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:30 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:300
L:88 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:96

**Raw Sequence Listing before editing
(for reference only)**



IFWP

RAW SEQUENCE LISTING

DATE: 05/04/2006

PATENT APPLICATION: US/10/574,787

TIME: 14:04:29

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\05042006\J574787.raw

3 <110> APPLICANT: Bayer HealthCare AG
 5 <120> TITLE OF INVENTION: Diagnostics and Therapeutics for Diseases Associated with N-Acetylated
 6 Alpha-Linked Acidic Dipeptidase-Like 1 (NAALADASE-like1)
 8 <130> FILE REFERENCE: BHC 03 01 003
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/574,787
 C--> 10 <141> CURRENT FILING DATE: 2006-04-06
 10 <160> NUMBER OF SEQ ID NOS: 5
 12 <170> SOFTWARE: PatentIn version 3.1

ERRORED SEQUENCES

Does Not Comply
Corrected Diskette Needed

193 <210> SEQ ID NO: 5
 194 <211> LENGTH: 19
 195 <212> TYPE: DNA
 196 <213> ORGANISM: artificial sequence
 198 <220> FEATURE:
 199 <223> OTHER INFORMATION: probe
 201 <400> SEQUENCE: 5
 202 ctggactcgg ccgaggcct
 E--> 204 BHC 03 1 003-Foreign Countries
 W--> 206 - 5 -
 E--> 209 BHC 03 1 003-Foreign Countries
 W--> 211 - 1 -

19

delete

VERIFICATION SUMMARY

DATE: 05/04/2006

PATENT APPLICATION: US/10/574,787

TIME: 14:04:30

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\05042006\J574787.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:30 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:300
L:88 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:96
L:204 M:334 E: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:5
L:206 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:209 M:334 E: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:5
L:211 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5